Accton

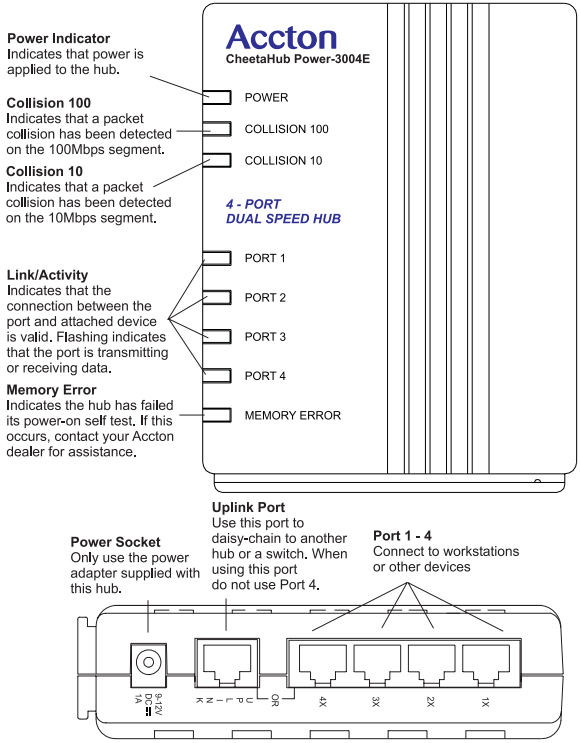
Making Partnership Work

CheetaHub Power-3004E
Quick Installation Guide

Introduction

Accton's CheetaHub Power-3004E is a compact dual-speed hub featuring 4 10BASE-T/100BASE-TX auto-sensing ports. This hub is completely plug and play, there is no configuration necessary. Also, the hub comes with its own versatile hub stand and can be mounted anywhere, so it's ideal for small workgroups.

The components of the CheetaHub Power-3004E are shown in the figure below:


Power Indicator
Indicates that power is applied to the hub.
Collision 100
Indicates that a packet collision has been detected on the 100Mbps segment.
Collision 10
Indicates that a packet collision has been detected on the 10Mbps segment.
Link/Activity
Indicates that the connection between the port and attached device is valid. Flashing indicates that the port is transmitting or receiving data.
Memory Error
Indicates the hub has failed its power-on self test. If this occurs, contact your Accton dealer for assistance.
Accton
CheetaHub Power-3004E
POWER
COLLISION 100
COLLISION 10
4 - PORT
DUAL SPEED HUB
PORT 1
PORT 2
PORT 3
PORT 4
MEMORY ERROR
Uplink Port
Use this port to daisy-chain to another hub or a switch. When using this port do not use Port 4.
Port 1 - 4
Connect to workstations or other devices
Power Socket
Only use the power adapter supplied with this hub.
UPLINK
OR
4X
3X
2X
1X

Check the Package

The CheetaHub Power-3004E includes:

- 1 EH3004E-TX
- 1 hub stand
- 1 user guide
- 1 appropriate AC Power Adapter
- 1 registration card (please return)

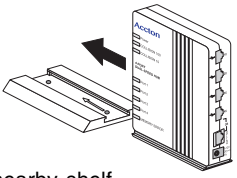
Side Panel RJ-45 Connectors

Accton's CheetaHub Power-3004E features 4 10BASE-T/ 100BASE-TX ports with RJ-45 connectors located on the side panel of the hub. Port 1-4 are MDI-X, with a built-in wiring crossover that allows for the use of straight-through twisted-pair cable for connections to devices without built-in crossover ports (i.e., workstations, printers, etc.).

Port 4 on this hub doubles as a crossover port and a straight-through Uplink (daisy-chain) port. The MDI Uplink port makes it convenient to connect straight-through cable from the hub to a crossover port on another device.

Mount the Hub

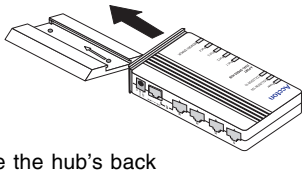
The CheetaHub Power-3004E with its flexible stand can be mounted on any flat or vertical surface.



To mount the hub on a flat surface:

1 Slide the stand onto the hub base (to stand upright) or back (to lay flat).
2 Place the hub on any convenient flat surface, such as a desktop or nearby shelf.

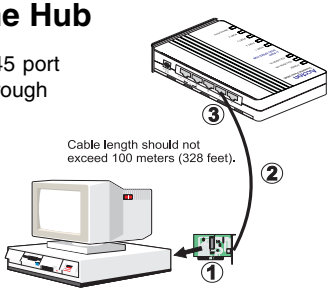
To mount the hub on a vertical surface:



1 First secure the stand to the desired location, such as a wall or side of a desk. You may use two small screws, Velcro™ strips, or any other technique.
2 With the stand secured, slide the hub's back onto the stand.

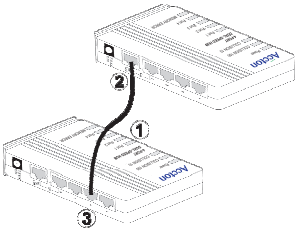
Connect PCs to the Hub

Connect each PC to an RJ-45 port on the hub with a straight-through twisted-pair cable, maximum 100 meters (328 ft.). The CheetaHub Power-3004E will support up to 4 PCs. Note that if you are using port 4, be sure not to use the Uplink port.



Cascade Devices to the Hub

If you need more ports, connect a crossover port on another device to the Uplink port on the hub with straight-through twisted-pair cable, maximum 5 meters (16.4 ft.). Note that if you are using the Uplink port you cannot use the fixed crossover port on port 4.



1. Prepare staight-through Category 5 twisted-pair cable with RJ-45 plugs. Make sure the cable does not exceed 5 meters (16.4 feet).
2. Connect one end of the cable to the hub's uplink port. When using the Uplink Port be sure not to use Port 4.
3. Connect the other end of the cable to an MDI-X RJ-45 port on the other device (not an MDI port).
   - Alternatively, you can connect from any MDI-X port on the hub to an MDI daisy-chain port on the other device.
   - You may also attach to MDI-X ports at both ends if you use crossover cabling.
   - When connecting to another 100Mbps Fast Ethernet hub, the number of cascaded hubs is limited to two, and the total network span allowed is only 205 meters (672 feet).

Verify System Operation

Check each connection by viewing the port status indicators shown in the following table. The hub monitors the link status for each port. If the Port indicator fails to light when you connect a device to the hub, follow the troubleshooting advice detailed in the next section.

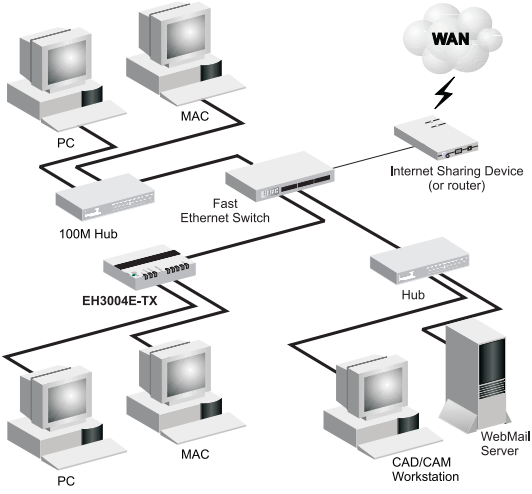
Port and Hub Status LEDs		
LEDs	**Condition**	**Status**
Power	Green	Hub is receiving power.
Collision 100	Flashing green	Indicates that a packet collision has been detected on the 100Mbps segment.
Collision 10	Flashing green	Indicates that a packet collision has been detected on the 10Mbps segment.
Port 1 ~ 4	Green	Port has established a valid 100Mbps network connection.
	Yellow	Port has established a valid 10Mbps network connection.
	Flashing	Traffic is traversing the port.
Memory Error	Yellow	Indicates the hub has failed its power-on self test. If this occurs, contact your Accton dealer for assistance.

Troubleshooting

Symptom: Power LED does not light after power on.
Cause: Power outlet or power cord may be defective.
Solution:
1. Check for loose connections.
2. Check the power outlet by using it for another device.
3. Replace the power cord.

Symptom: Port LED does not light after connection is made.
Cause: Hub port, network card or cable may be defective.
Solution:
1. Check that the hub and attached device are both powered on.
2. Be sure the network cable is connected to both devices.
3. Verify that Category 5 cable is used for 100Mbps connections and Category 3 or greater for 10Mbps connections. Also verify that the maximum cable length does not exceed 5 meters (16.4 feet) when connecting to a 100Mbps hub, or 100 meters (328 feet) when connecting to any other device.
4. Check the network card and cable connections for defects.
5. Replace the defective card or cable if necessary.

Application Diagram



Specifications

Standards Conformance	IEEE 802.3, IEEE 802.3u, ISO/IEC 8802-3
Number of Ports	4 RJ-45 ports Ports 1-3: Twisted-pair, fixed crossover Port 4: Twisted-pair, choice between fixed crossover or straight-through (daisy-chain port)
Network Interface	RJ-45: 100 ohm, UTP cable 10BASE-T: Categories 3, 4, or 5 100BASE-TX: Category 5
Switching Method	Store-and-forward
MAC Address Table	1.7K entries per system
Memory Buffer	240 Kbytes per system
Filtering Rate	Full line speed
Forwarding Rate	Full line speed
Learning Rate	Full line speed
Dimensions	130 x 95 x 40 mm (5.1 x 3.7 x 1.6 in)
Weight	0.3 kg (1.76 lbs)
Input Power	9 to 12 VDC, 1A (from external power adapter)
Power Consumption	6.3 Watts
Heat Dissipation	21.5 BTU/hr
Maximum Current	1.0A @ 9 VDC
Access Method	CSMA/CD, 10 Mbps or 100 Mbps
Status LEDs	Power (green), Collision 100 (green), Collision 10 (green), Link (10Mbps - yellow; 100Mbps - green)/Activity (flashing), Memory Error (yellow)
Environmental	
Temperature	0° - 50°C / 32° - 122°F (Standard Operating) -40° - 70°C / -40° - 158°F (Storage)
Humidity	5 - 95% (Noncondensing)
Certification	CE Mark
Emissions	FCC Class B, VCCI Class B, EN55022 (CISPR 22) Class B, C-Tick - AS/NZS 3548 (1995) Class B, IEC 1000-4-2/3/4
Safety	CSA/NRTL (C22.2.950, UL 1950), TÜV/GS (EN60950), IEC60950 (CB Report)

Certification

FCC Class B Certification

This device complies with Part 15 of the FCC Rules. Operation is subject to the following conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Warning: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from the one which the receiver is connected to
- Consult the dealer or an experienced radio/TV technician for help

You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

Note: In order to maintain compliance with the limits of a Class B digital device, Accton requires that you use a quality interface cable when connecting to this device. Changes or modifications not expressly approved by Accton could void your authority to operate this equipment. Suggested cable type is unshielded or shielded (UTP/STP) cable – Category 3 or greater for 10Mbps connections, and Category 5 for 100Mbps connections.

Class B (Canada Department of Communications)

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the interference-causing equipment standard entitled "Digital Apparatus", ICES-003 of the Department of Communications.

Cet appareil numérique respecte les limites de bruits radioélectriques applicables aux appareils numériques de Classe B prescrites dans la norme sur le matériel brouilleur: "Appareils Numérques", NMB-003 édictée par le ministère des Communications.

VCCI Class B Compliance (Japan)

この装置は、情報処理装置等電波障害自主規制協議会（ＶＣＣＩ）の基準
に基づくクラスＢ情報技術装置です。この装置は、家庭環境で使用すること
を目的としていますが、この装置がラジオやテレビジョン受信機に近接して
使用されると、受信障害を引き起こすことがあります。
取扱説明書に従って正しい取り扱いをして下さい。

CE Mark Declaration of Conformance (for EMI and Safety - Europe)

This is to certify that this product complies with ISO/IEC Guide 22 and EN45014. It conforms to the following specifications:

EMC:	EN55022(1988)/CISPR-22(1985)	class B
	EN60555-2(1995)	class B
	EN60555-3	
	IEC1000-4-2(1995)	4kV CD, 8kV AD
	IEC1000-4-3(1995)	3V/m
	IEC1000-4-4(1995)	1kV - (power line), 0.5kV - (signal line)

This product complies with the requirements of the Low Voltage Directive 73/23/EEC and the EMC Directive 89/336/EEC.

Warning! Do not plug a phone jack connector in the RJ-45 port. This may damage this device. Les raccordeurs ne sont pas utilisé pour le système téléphonique!

Safety Compliance

Underwriters Laboratories Compliance Statement

Important! Before making connections, make sure you have the correct Cord Set. Check it (read the label on the cable) against the following specification list.

Voltage	Cord Set Specifications
120 Volts	UL Listed/CSA Certified Cord Set
	Minimum 18 AWG; type SVT or SJT three conductor cord
	Maximum length of 15 feet
	Parallel blade, grounding type attachment plug rated 15A, 125V
240 Volts	UL Listed/CSA Certified Cord Set
(North America)	Minimum 18 AWG; type SVT or SJT three conductor cord
	Maximum length of 15 feet
	Tandem blade, grounding type attachment plug rated 15A, 125V
240 Volts (Europe only)	Cord Set with H05VV-F cord having three conductors with minimum diameter of 0.75 mm²
	IEC-320 receptacle; male plug rated 10A, 250V

Wichtige Sicherheitshinweise *(German Safety Statement)*

1. Bitte lesen Sie diese Hinweise sorgfältig durch.
2. Heben Sie diese Anleitung für den späteren Gebrauch auf.
3. Vor jedem Reinigen ist das Gerät vom Stromnetz zu trennen. Verwenden Sie keine Flüssigoder Aerosolreiniger. Am besten eignet sich ein angefeuchtetes Tuch zur Reinigung.
4. Die Netzanschlu ßsteckdose soll nahe dem Gerät angebracht und leicht zugänglich sein.
5. Das Gerät ist vor Feuchtigkeit zu schützen.
6. Bei der Aufstellung des Gerätes ist auf sicheren Stand zu achten. Ein Kippen oder Fallen könnte Beschädigungen hervorrufen.
7. Die Belüftungsöffnungen dienen der Luftzirkulation, die das Gerät vor Überhitzung schützt. Sorgen Sie dafür, daß diese Öffnungen nicht abgedeckt werden.
8. Beachten Sie beim Anschluß an das Stromnetz die Anschlußwerte.
9. Verlegen Sie die Netzanschlußleitung so, daß niemand darüber fallen kann. Es sollte auch nichts auf der Leitung abgestellt werden.
10. Alle Hinweise und Warnungen, die sich am Gerät befinden, sind zu beachten.
11. Wird das Gerät über einen längeren Zeitraum nicht benutzt, sollten Sie es vom Stromnetz trennen. Somit wird im Falle einer Überspannung eine Beschädigung vermieden.
12. Durch die Lüftungsöffnungen dürfen niemals Gegenstände oder Flüssigkeiten in das Gerät gelangen. Dies könnte einen Brand bzw. elektrischen Schlag auslösen.
13. Öffnen sie niemals das Gerät. Das Gerät darf aus Gründen der elektrischen Sicherheit nur von authorisiertem Servicepersonal geöffnet werden.
14. Wenn folgende Situationen auftreten ist das Gerät vom Stromnetz zu trennen und von einer qualifizierten Servicestelle zu überprüfen:
    a. Netzkabel oder Netzstecker sind beschädigt.
    b. Flüssigkeit ist in das Gerät eingedrungen.
    c. Das Gerät war Feuchtigkeit ausgesetzt.
    d. Wenn das Gerät nicht der Bedienungsanleitung entsprechend funktioniert oder Sie mit Hilfe dieser Anleitung keine Verbesserung erzielen.
    e. Das Gerät ist gefallen und/oder das Gehäuse ist beschädigt.
    f. Wenn das Gerät deutliche Anzeichen eines Defektes aufweist.
15. Stellen Sie sicher, daß die Stromversorgung dieses Gerätes nach der EN 60950 geprüft ist. Ausgangswerte der Stromversorgung sollten die Werte von AC 7,5-8V, 50-60Hz nicht über oder unterschreiten sowie den minimalen Strom von 1A nicht unterschreiten.

Der arbeitsplatzbezogene Schalldruckpegel nach DIN 45 635 Teil 1000 beträgt 70dB(A) oder weniger.

Warranty

Accton warrants to the original owner that the product delivered in this package will be free from defects in material and workmanship for a period of three (3) years from the date of purchase from Accton or its authorized reseller. For the warranty to apply, you must register your purchase by returning the registration card indicating the date of purchase and including proof of purchase. There will be a minimal charge to replace consumable components, such as fuses, power transformers, and mechanical cooling devices. The warranty does not cover the product if it is damaged in the process of being installed. Accton recommends that you have the company from whom you purchased this product install it.

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